

# Curriculum Vitae

## Contact information

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## Education

04/2007 PhD thesis: Physics, Nuclear Physics: *Experimental study of proton induced nuclear reactions in  ${}^6,{}^7\text{Li}$* , FCT-UNL

06/2000 Post-Graduation: Sanitary Engineering

07/1999 Master Thesis: Physics, Particle Physics, Astrophysics and Nuclear Physics: *Estudo da produção das ressonâncias  $J/\Psi$  e  $\Psi'$  e do contínuo dimuição em colisões  $p-W$  a 450 GeV/c*, IST

05/1995 Diploma Thesis: Physics Engineering, Solid State Physics, Computer simulation: *Quantitative infrared analysis of the asymmetric stretching peak of  $\text{SiO}_2$  films thermally grown*, FCT-UNL

## Research Interests

- Nuclear Reactions / Nuclear Astrophysics;
- Ion Beam Analysis;
- Big Bang nucleosynthesis;
- Radiation and Radiotherapy;
- Electron screening;
- Cultural Heritage.

## Professional Experience

04/2007 – present	Assistant Professor at Physics Department, FCT-UNL, Lisboa, Portugal.
06/2000-03/2007	Teaching Assistant at Physics Department, FCT-UNL, Lisboa, Portugal.
06/1999-05/2000	Student Teaching Assistant at Physics Department, FCT-UNL, Lisboa, Portugal.
06/1999- present	Researcher at CFNUL (member of LUNA collaboration), Lisboa, Portugal
11/1995-05/1999	Assistant Researcher at LIP (member of NA50 CERN collaboration), Lisboa, Portugal
03/1994-10/1995	Assistant Researcher at CEMOP, Lisboa, Portugal

## Teaching Experience

06/1999 – present	Lecturer of the courses “Mechanics”, “Thermodynamics”, “Electromagnetism”, “Vibrations and Waves”, “Geophysics”, “Nuclear Physics”, “Radiation and Radiotherapy”, “Characterization techniques of materials and surfaces”
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## Academic Supervision Experience

### PhD thesis

1. Hugo Silva  
PhD in Physics (Nuclear Physics) at FCT-UNL.  
Thesis Title: “Estudo experimental detalhado da reacção de fusão entre núcleos de  $^{16}\text{O}$ ”  
Status: Ongoing

### Master thesis

1. Filipa Lourenço  
Master in Physics Engineering at FCT-UNL.  
Thesis Title: “Optimização da linha de PIGE do acelerador Tandem de 3 MV da UFA-ITN”  
Status: concluded September 2011.

2. Nuno Fernandes

Master in Physics Engineering at FCT-UNL.

Thesis Title: "Automatização do controlo de uma linha de feixe de iões de um acelerador de partículas utilizando ferramentas de programação LabView"

Status: concluded September 2010.

### **Participation in Research projects**

EXPL/EPH-ARQ/1015/2013 - Ongoing (Head of Team)

PTDC/FIS/121939/2010 – Ongoing (member of team)

POCI/FP/81973/2007 - 2007-07-01/2008-09-30(member of team)

POCI/FP/63939/2005 - 2006-09-01/2007-10-31(member of team)

POCTI/FNU/43727/2002 - 2003-04-23/2004-06-30(member of team)

POCTI/FNU/45092/2002, Abril 2004-Jul 2007

POCTI/FNU/41097/2001, Out 2002 - Jul 2006

POCTI/FIS/10025/1998, Jul. 2001 – Jul. 2003

PRAXIS XXI – PCEX/C/FIS/115/96, Out. 97-Out. 99

### **Publications in Refereed Journals**

1."Comparative analysis of anodized, implanted and sputtered tantalum oxide targets for the study of  $^{16}\text{O}+^{16}\text{O}$  fusion reaction", Silva, H., Cruz, J., Redondo-Cubero, A., Santos, C., Fonseca, M., Luis, H., Jesus, A.P., 2014 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 331 , pp. 78.

2. "Analysis of a gold solidus of roman emperor Valentinian I", Cruz, J., Corregidor, V., Alves, L.C., Carvalho, P., Fonseca, M., 2013 Microsc. Microanal. 19 (Suppl 4).

3. "Analysis of surface stains on modern gold coins", Corregidor, V., Alves, L.C., Cruz, J., 2013 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 306 , pp. 232.

4. "Precise determination of the unperturbed  $B8$  neutrino spectrum", Roger, T., Büscher, J., Bastin, B., Kirsebom, O.S., Raabe, R., Alcorta, M., Aystö, J., Borge, M.J.G., (...), Wilschut, H.W., 2012 Physical Review Letters 108 (16).

5. "Electron screening effects in nuclear reactions: Still an unsolved problem", Cruz, J., Luís, H., Fonseca, M., Jesus, A.P., 2012 Journal of Physics: Conference Series 337 (1).

6. "Golden glazes analysis by PIGE and PIXE techniques", Fonseca, M., Luís, H., Franco, N., Reis, M.A., Chaves, P.C., Taborda, A., Cruz, J., Galaviz, D., (...), Jesus, A.P., 2011 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 269 (24), pp. 3060.
7. "PIGE analysis of magnesium and beryllium", Fonseca, M., Jesus, A.P., Luís, H., Mateus, R., Cruz, J., Gasques, L., Galaviz, D., Ribeiro, J.P., 2010 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 268 (11-12), pp. 1806.
8. "Production and characterization of thin  ${}^7\text{Li}$  targets fabricated by ion implantation", Cruz, J., Fonseca, M., Luis, H., Mateus, R., Marques, H., Jesus, A.P., Ribeiro, J.P., Teodoro, O.M.N.D., Rolfs, C., 2009 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 267 (3), pp. 478.
9. "Experimental study of proton-induced nuclear reactions in  ${}^6,{}^7\text{Li}$ ", Cruz, J., Luis, H., Fonseca, M., Fülöp, Z., Gyürky, G., Raiola, F., Aliotta, M., Kettner, K.U., (...), Rolfs, C., 2008 Journal of Physics G: Nuclear and Particle Physics 35 (1).
10. "First hint on a change of the  ${}^{210}\text{Po}$  alpha-decay half-life in the metal Cu", Raiola, F., Spillane, T., Limata, B., Wang, B., Yan, S., Aliotta, M., Becker, H.W., Cruz, J., (...), Strieder, F., 2007 European Physical Journal A 32 (1), pp. 51.
11. "Low energy measurement of the  ${}^{14}\text{N}(p,\gamma){}^{15}\text{O}$  total cross section at the LUNA underground facility", Bemmerer, D., Confortola, F., Lemut, A., Bonetti, R., Broggin, C., Corvisiero, P., Costantini, H., Cruz, J., (...), Trautvetter, H.P., 2006 Nuclear Physics A779, pp. 297.
12. "Change of the  ${}^7\text{Be}$  electron capture half-life in metallic environments", Wang, B., Yan, S., Limata, B., Raiola, F., Aliotta, M., Becker, H.W., Cruz, J., De Cesare, N., (...), Terrasi, F. 2006 European Physical Journal A 28 (3), pp. 375.
13. "Low energy underground study of  ${}^{14}\text{N}(p,\gamma){}^{15}\text{O}$  cross section Lemut, A., Confortola, F., Bemmerer, D., Bonetti, R., Broggin, C., Corvisiero, P., Costantini, H., Cruz, J., (...), Trautvetter, H.P., 2006 AIP Conference Proceedings 831, pp. 383.
14. "Electron screening: A review", Raiola, F., Cruz, J., Gyürky, G., Fülöp, Z., Zeng, S., Aliotta, M., Becker, H.W., Burchard, B., (...), Terrasi, F., 2006 AIP Conference Proceedings 831, pp. 296.
15. "Underground measurement of  ${}^{14}\text{N}(p,\gamma){}^{15}\text{O}$  astrophysical factor at low energy", Confortola, F., Bemmerer, D., Bonetti, R., Broggin, C., Casanova, M.L., Corvisiero, P., Costantini, H., Cruz, J., (...), Trautvetter, H.P., 2006 Journal of Physics: Conference Series 39 (1), pp. 263.
16. "First measurement of the  ${}^{14}\text{N}(p,\gamma){}^{15}\text{O}$  cross section down to 70 keV", Lemut, A., Bemmerer, D., Confortola, F., Bonetti, R., Broggin, C., Corvisiero, P., Costantini, H., Cruz, J., (...), Trautvetter, H.P., 2006 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 634 (5-6), pp. 483.

17. "CNO hydrogen burning studied deep underground", Bemmerer, D., Confortola, F., Lemut, A., Bonetti, R., Brogгинi, C., Corvisiero, P., Costantini, H., Cruz, J., (...), Trautvetter, H.P., 2006 European Physical Journal A 27 (SUPPL. 1), pp. 161.
18. "Towards a high-precision measurement of the  ${}^3\text{He}(\alpha,\gamma){}^7\text{Be}$  cross section at LUNA", Costantini, H., Bemmerer, D., Bezzon, P., Bonetti, R., Brogгинi, C., Casanova, M.L., Confortola, F., Corvisiero, P., (...), Trautvetter, H.P., 2006 European Physical Journal A 27 (SUPPL. 1), pp. 177.
19. "Enhanced  $d(d,p)t$  fusion reaction in metals", Raiola, F., Burchard, B., Fülöp, Zs., Gyürky, Gy., Zeng, S., Cruz, J., Di Leva, A., Limata, B., (...), Terrasi, F., 2006 European Physical Journal A 27 (SUPPL. 1), pp. 79.
20. "Electron screening in  $d(d, p)t$  for deuterated metals: Temperature effects", Raiola, F., Burchard, B., Fülöp, Z., Gyürky, G., Zeng, S., Cruz, J., Di Leva, A., Limata, B., (...), Terrasi, F., 2005 Journal of Physics G: Nuclear and Particle Physics 31 (11), pp. 1141.
21. "Recent results from the LUNA facility at Gran Sasso", Prati, P., Bemmerer, D., Bonetti, R., Brogгинi, C., Confortola, F., Corvisiero, P., Costantini, H., Cruz, J., (...), Trautvetter, H.P., 2005 Journal of Physics G: Nuclear and Particle Physics 31 (10).
22. "Electron screening in  ${}^7\text{Li}(p,\alpha)\alpha$  and  ${}^6\text{Li}(p,\alpha){}^3\text{He}$  for different environments", Cruz, J., Fülöp, Z., Gyürky, G., Raiola, F., Di Leva, A., Limata, B., Fonseca, M., Luis, H., (...), Strieder, F., 2005 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 624 (3-4), pp. 181.
23. "S-factor of  ${}^{14}\text{N}(p,\gamma){}^{15}\text{O}$  at astrophysical energies", Imbriani, G., Costantini, H., Formicola, A., Vomiero, A., Angulo, C., Bemmerer, D., Bonetti, R., Brogгинi, C., (...), Trautvetter, H.P., 2005 European Physical Journal A 25 (3), pp. 455.
24. "Recent results of the  ${}^{14}\text{N}(p,\gamma){}^{15}\text{O}$  measurement at LUNA", Costantini, H., Angulo, C., Bemmerer, D., Bonetti, R., Brogгинi, C., Confortola, F., Corvisiero, P., Cruz, J., (...), Zavatarelli, S., 2005 Nuclear Physics A 758 (1-4 SPEC. ISS.)
25. "Feasibility of low-energy radiative-capture experiments at the LUNA underground accelerator facility", Bemmerer, D., Confortola, F., Lemut, A., Bonetti, R., Brogгинi, C., Corvisiero, P., Costantini, H., Cruz, J., (...), Vomiero, A., 2005 European Physical Journal A 24 (2), pp. 313.
26. "The  ${}^{14}\text{N}(p,\gamma){}^{15}\text{O}$  measurement at low energy", Confortola, F., Bemmerer, D., Bonetti, R., Brogгинi, C., Corvisiero, P., Costantini, H., Cruz, J., Formicola, A., (...), Zavatarelli, S., 2004 Nuovo Cimento della Societa Italiana di Fisica C 27 (5), pp. 423.
27. "Charmonia suppression in nucleus-nucleus interactions at CERN SPS", Arnaldi, R., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Wu, T., 2004 Acta Physica Hungarica, Series A: Heavy Ion Physics 19 (3-4), pp. 337.

28. "Astrophysical S-factor of  $^{14}\text{N}(p,\gamma)^{15}\text{O}$ ", Formicola, A., Imbriani, G., Costantini, H., Angulo, C., Bemmerer, D., Bonetti, R., Brogгинi, C., Corvisiero, P., (...), Zavatarelli, S., 2004 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 591 (1-2), pp. 61.
29. "Measurement of the inelastic scattering of protons by  $^{23}\text{Na}$  in the energy range 1.25-2.40 MeV", Mateus, R., Jesus, A.P., Cruz, J., Ribeiro, J.P., 2004 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 219-220 (1-4), pp. 307.
30. "The bottleneck of CNO burning and the age of Globular Clusters", Imbriani, G., Costantini, H., Formicola, A., Bemmerer, D., Bonetti, R., Brogгинi, C., Corvisiero, P., Cruz, J., (...), Zavatarelli, S., 2004 Astronomy and Astrophysics 420 (2), pp. 625.
31. "Charmonium production and nuclear absorption in p-A interactions at 450 GeV", Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Beolè, S., Boldea, V., (...), Willis, N., 2004 European Physical Journal C 33 (1), pp. 31.
32. "Latest results on  $J/\psi$  anomalous suppression", Ramos, S., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Wu, T. 2004 Pramana - Journal of Physics 62 (3), pp. 627.
33. "The production of  $\phi$ ,  $\omega$  and  $\rho$  mesons in p-, d-, S- and Pb-induced reactions at the CERN SPS", Jouan, D., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Wu, T., 2004 Journal of Physics G: Nuclear and Particle Physics 30 (1).
34. "Transverse momentum and transverse mass distributions of  $J/\psi$  mesons produced in p-A and Pb-Pb interactions at the CERN SPS", Kurepin, A.B., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Wu, T., 2003 Nuclear Physics A 721.
35. " $J/\psi$  and  $\phi$  production from proton to Pb induced reactions at CERN SPS", Jouan, D., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Wu, T., 2003 Nuclear Physics A 721.
36. "Study of deconfinement in NA50", Bordalo, P., Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 2003 Pramana - Journal of Physics 60 (4), pp. 817.
37. "Results on leptonic probes from NA50" Ramello, L., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Wu, T., 2003 Nuclear Physics A 715.
38. "Charmonia absorption in p-A collisions at the CERN SPS results and implications for Pb-Pb interactions", Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., Beolè, S., (...), Wu, T., 2003 Nuclear Physics A 715.
39. " $\phi$  production in Pb-Pb collisions at 158 GeV/c per nucleon incident momentum", Alessandro, B., Alexa, C., Arnaldi, R., Astruc, J., Atayan, M., Baglin, C., Baldit, A., Beolè, S., (...), Willis, N., 2003 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 555 (3-4), pp. 147.

40. "Charmonia and Drell-Yan production in proton-nucleus collisions at the CERN SPS", Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Beolè, S., Boldea, V., Bordalo, P., (...), Willis, N., 2003 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 553 (3-4), pp. 167.
41. "Enhanced electron screening in d(d,p)t for deuterated Ta", Raiola, F., Migliardi, P., Gyürky, G., Aliotta, M., Formicola, A., Bonetti, R., Brogгинi, C., Campajola, L., (...), Zavatarelli, S., 2002 European Physical Journal A 13 (3), pp. 377.
42. "Electron screening in d(d,p)t for deuterated metals and the periodic table", Raiola, F., Migliardi, P., Gang, L., Bonomo, C., Gyürky, G., Bonetti, R., Brogгинi, C., Christensen, N.E., (...), Winter, J., 2002 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 547 (3-4), pp. 193.
43. "A new setup for the underground study of capture reactions", Casella, C., Costantini, H., Lemut, A., Limata, B., Bemmerer, D., Bonetti, R., Brogгинi, C., Campajola, L., (...), Zavatarelli, S., 2002 Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment 489 (1-3), pp. 160.
44. "First measurement of the d(p, $\gamma$ )<sup>3</sup>He cross section down to the solar Gamov peak", Casella, C., Costantini, H., Lemut, A., Limata, B., Bonetti, R., Brogгинi, C., Campajola, L., Corvisiero, P., (...), Zavatarelli, S., 2002 Nuclear Physics A 706 (1-2), pp. 203.
45. " $\phi$  and  $\rho + \omega$  vector-mesons produced in lead-induced collisions", Quintans, C., Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 2002 Journal of Physics G: Nuclear and Particle Physics 28 (7), pp. 1809.
46. "Proton-induced  $\gamma$ -ray analysis of lithium in thick samples", Mateus, R., Jesus, A.P., Braizinha, B., Cruz, J., Pinto, J.V., Ribeiro, J.P., 2002 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 190 (1-4), pp. 117.
47. "Charmonia suppression in p-A collisions at 450 GeV/c; new results from NA50", Scomparin, E., Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 2002 Nuclear Physics A 698 (1-4).
48. "Enhancement of intermediate mass dimuons in nucleus-nucleus collisions at the CERN-SPS", Capelli, L., Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 2002 Nuclear Physics A 698 (1-4).
49. "Recent results on J/ $\psi$  from experiment NA50", Bordalo, P., Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 2002 Nuclear Physics A 698 (1-4).
50. "Influence of target thickness on resonant elastic scattering of protons by <sup>19</sup>F", Jesus, A.P., Braizinha, B., Cruz, J., Ribeiro, J.P., 2001 Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms 174 (3), pp. 229.

51. "Transverse momentum distributions of  $J/\psi$ ,  $\psi'$ , Drell-Yan and continuum dimuons produced in Pb-Pb interactions at the SPS", Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Willis, N., 2001 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 499 (1-2), pp. 85.
52. "Dimuon and charm production in nucleus-nucleus collisions at the CERN-SPS: The NA38 and NA50 collaborations", Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Astruc, J., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 2000 European Physical Journal C 14 (3), pp. 443.
53. "Evidence for deconfinement of quarks and gluons from the  $J/\psi$  suppression pattern measured in Pb-Pb collisions at the CERN-SPS", Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., Bedjidian, M., (...), Willis, N., 2000 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 477 (1-3), pp. 28.
54. "Observation of a threshold effect in the anomalous  $J/\psi$  suppression", Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Astruc, J., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 1999 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 450 (4), pp. 456.
55. "A test pixel vertex spectrometer to complement the NA50 dimuon spectrometer", Abreu, M.C., Atayan, M., Baglin, C., Baldit, A., Baldisseri, A., Bedjidian, M., Bordalo, P., Borel, H., (...), Vardanyan, H., 1999 Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment 435 (1-2), pp. 161.
56. "Transverse momentum distribution of  $J/\psi$  produced in Pb-Pb interactions at 158 GeV/c per nucleon", Abreu, M.C., Alexa, C., Alessandro, B., Astruc, J., Arnaldi, R., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 1999 Nuclear Physics A 654 (1 SUPPL. 1).
57. "Observation of fission in Pb-Pb interactions at 158A GeV", Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Astruc, J., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 1999 Physical Review C - Nuclear Physics 59 (2), pp. 876.
58. "A possible evidence of Coulomb fission in lead-lead collisions at the CERN SPS", Abreu, M.C., Alessandro, B., Alexa, C., Arnaldi, R., Astruc, J., Atayan, M., Baglin, C., Baldit, A., (...), Willis, N., 1998 Nuovo Cimento della Societa Italiana di Fisica A 111 (8-9), pp. 963.
59. "Numerical simulation of a  $\mu\text{C-Si:H}$  p-i-n photo-diode under non-uniform illumination: A 2D transport problem", Fantoni, A., Vieira, M., Cruz, J., Martins, R., 1997 Proceedings of SPIE - The International Society for Optical Engineering 2997, pp. 234.
60. "Anomalous  $J/\psi$  suppression in Pb-Pb interactions at 158 GeV/c per nucleon", NA50 collaboration, Abreu, M.C., Alessandro, B., Alexa, C., Astruc, J., Baglin, C., Baldit, A., Bedjidian, M., Bellaiche, F., (...), Willis, N., 1997 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 410 (2-4), pp. 337.



61. "J/ψ and Drell-Yan cross-sections in Pb-Pb interactions at 158 GeV/c per nucleon", Abreu, M.C., Alessandro, B., Alexa, C., Astruc, J., Baglin, C., Baldit, A., Bedjidian, M., Bellaiche, F., (...), Willis, N., 1997 Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics 410 (2-4), pp. 327.

62. "Modelling a μc-Si:H p-i-n device under non-uniform illumination" Fantoni, A., Vieira, M., Cruz, J., Martins, R., 1997 Thin Solid Films 296 (1-2), pp. 110.

63. "A two-dimensional numerical simulation of a non-uniformly illuminated amorphous silicon solar cell", Fantoni, A., Vieira, M., Cruz, J., Schwarz, R., Martins, R., 1996 Journal of Physics D: Applied Physics 29 (12), pp. 3154.

64. "Amorphous and microcrystalline silicon p-i-n optical speed sensors based on the flying spot technique", Vieira, M., Fantoni, A., Koynov, S., Cruz, J., Maçarico, A., Martins, R., 1996 Journal of Non-Crystalline Solids 198-200 (PART 2), pp. 1193.

### **Conference and Outreach activities**

- Outreach Activities coordinator – Physics Department, FCT-UNL

01/2014 - present

- Nuclear Physics in Astrophysics VI Conference

26<sup>th</sup> International Nuclear Physics Divisional Conference of the European Physical Society

Member of the Local Organizing Committee

May 19<sup>th</sup> – 24<sup>th</sup>, 2013

February 2015